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STATE OF MARYLAND
DEPARTMENT OF THE ENVIRONMENT
WATER MANAGEMENT ADMINISTRATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT FOR STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY TENTATIVE DETERMINATION TO MODIFY GENERAL PERMIT

FACT SHEET

The Maryland Department of the Environment (MDE) has reached a tentative determination to modify the National Pollutant Discharge Elimination System (NPDES) general permit for construction activity. The general permit was issued on January 1, 2009. The modification is designed to comply with recent changes to EPA regulations related to control of stormwater pollutant discharges, including adding provisions for a turbidity effluent standard for certain construction projects. Note that in the event EPA's rule, which is the basis for this proposed modification to the general permit issued in Maryland, is stayed and/or vacated as a result of a judicial review under federal law then this proposed modification will not take effect until such time a final ruling is provided on the EPA rule and, if appropriate, a new effective date is established. The text to be added to the permit is shown below:

Part III.A. Prohibition against Non-Stormwater Discharges is modified to include the following:

5. Prohibited Discharges. The following discharges are prohibited:
   a. Wastewater from washout of concrete, unless managed by an appropriate control;
   b. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
   c. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and
   d. Soaps or solvents used in vehicle and equipment washing.

Part IV.A. Effluent Limitations is modified to include the following:

3. Federal Effluent Limitations Guidelines. The permittee must implement EPA's Effluent Limitations Guidelines and Standards for the Construction Industry ("ELGs"), 40 C.F.R. Part 450 once they become effective under federal law. The ELGs by their terms provide as follows:
   a. Best Practicable Technology Currently Available (BPT) and Best Conventional Pollutant Control Technology (BCT). Effective February 1, 2010, all new construction projects authorized under this general permit shall, at a minimum, comply with the following

effluent limitations representing the degree of effluent reduction attainable by application of the best practicable control technology currently available (BPT) and the best conventional pollutant control technology (BCT). The provisions of this section do not apply to discharges associated with interstate natural gas pipeline construction activity.

(1) Erosion and Sediment Controls. Design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, such controls must be designed, installed and maintained to:

i. Control stormwater volume and velocity within the site to minimize soil erosion;

ii. Control stormwater discharges, including both peak flow rates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel and stream bank erosion;

iii. Minimize the amount of soil exposed during construction activity;

iv. Minimize the disturbance of steep slopes;

v. Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site;

vi. Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration, unless infeasible; and

vii. Minimize soil compaction and, unless infeasible, preserve topsoil.

(2) Soil Stabilization. Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. Stabilization must be completed within a period of time determined by the permitting authority. In drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed as specified by the permitting authority.

(3) Dewatering. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited unless managed by appropriate controls.

(4) Pollution Prevention Measures. Design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented and maintained to:

i. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;

ii. Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater; and

iii. Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.

(5) Surface Outlets. When discharging from basins and impoundments, utilize outlet structures that withdraw water from the surface, unless infeasible.

b. Best Available Control Technology Economically Achievable (BAT)—Projects Disturbing 20 or More Acres. Effective August 2, 2011, all construction projects authorized under this general permit during construction activity that disturbs 20 or more acres of land at one time, including non-contiguous land disturbances that take place at the same time and are part of a larger common plan of development or sale, shall, at a minimum, comply with an effluent limitation representing the degree of effluent reduction attainable by application of the best available technology economically achievable (BAT). The average turbidity of any discharge for any day must not exceed the Pollutant Daily maximum value in Nephelometric turbidity units (NTU) of 280. If stormwater discharges in any day occur as a result of a storm event in that same day that is larger than the local 2-year, 24-hour storm, the effluent limitation of this section does not apply for that day. Each sample must be analyzed for turbidity in accordance with the analytical and sampling methods for the analysis of turbidity as identified in Title 40 CFR Part 136 - "Guidelines Establishing Test Procedures for the Analysis of Pollutants."

c. Best Available Control Technology Economically Achievable (BAT)—Projects Disturbing 10 or More Acres. Effective February 2, 2014, all construction projects authorized under this general permit during construction activity that disturbs ten or more acres of land area at one time, including non-contiguous land disturbances that take place at the same time and are part of a larger common plan of development or sale, shall, at a minimum, comply with an effluent limitation representing the degree of effluent reduction attainable by application of the best available technology economically achievable (BAT). The average turbidity of any discharge for any day must not exceed the Pollutant Daily maximum value in Nephelometric turbidity units (NTU) of 280. If stormwater discharges in any day occur as a result of a storm event in that same day that is larger than the local 2-year, 24-hour storm, the effluent limitation of this section does not apply for that day. Each sample must be analyzed for turbidity in accordance with the analytical and sampling methods for the analysis of turbidity as identified in Title 40 CFR Part 136 - "Guidelines Establishing Test Procedures for the Analysis of Pollutants."

Purpose/Authority

The purpose of the federal National Pollutant Discharge Elimination system (NPDES) stormwater program is to control pollution generated from runoff associated with industrial activity, including construction, and municipal separate storm sewer systems. An individual or general permit is required for all construction activity in Maryland with a planned total disturbance of 1 acre or more. Conditions of the permits include compliance with approved erosion/sediment control and stormwater management plans, self-inspection and record keeping. The permit authorizes stormwater discharges from these construction sites. The primary pollutant to be controlled is sediment. Authority for Maryland's NPDES General Permit for Construction Activity is through the federal Clean Water Act Section 402 and the Code of Federal Regulations (40 CFR 122.26), and the State Environment Article, Title 9, Subtitle 3: COMAR 26.08.04.

This general permit is a joint federal and State permit and subject to federal and State regulations. The Clean Water Act (CWA), federal regulations, and numerous guidelines and policies of the United States Environmental Protection Agency (EPA) provide the federal permit requirements. The Annotated Code of Maryland, Environment Article, Code of Maryland Regulations (COMAR), and policies and guidelines of the Maryland Department of the Environment (MDE) provide the State permitting requirements.

Permit History

MDE issued its first NPDES general permit for stormwater associated with construction activity in 1993. This permit was required for all construction activity disturbing five acres or more. MDE reissued the general permit in 1997 and 2003. In accordance with EPA's Phase II stormwater regulations, the 2003 general permit was required for all construction activity disturbing one acre or more. When MDE gave notice of its tentative determination to reissue the general permit in early 2008, a number of stakeholders made significant comments regarding the provisions of that draft general permit. MDE responded by issuing an interim general permit (with minor changes) on March 31, 2008, with an effective date only through December 31, 2008. MDE initiated a series of public meetings with stakeholders separate from the formal permitting process to discuss changes to permit provisions. The attendees at the public meetings included representatives of environmental organizations, homebuilder organizations, design professionals, state and local governments, and other businesses that manage construction projects. Participants discussed a range of changes to permit provisions, and reached a level of consensus on some of these. MDE considered these permit provisions in its development of the general permit. These permit provisions focus on the public notification and participation processes at the time of Notice of Intent submission, as well as a new provision regarding actions to be taken when a significant amount of sediment leaves the construction site. MDE issued a tentative determination to issue the general permit on October 24, 2008, and held a public hearing on the general permit on November 24, 2008. MDE also received written comments on the general permit. On December 31, 2008, MDE received a legal challenge to the final determination for the new general permit for stormwater related to construction activity disturbing one or more acres. Because the proposed general permit was challenged, it was not available for permit coverage effective on January 1, 2009, as proposed. The interim general permit that was in effect expired on December 31, 2008. As a result, MDE required developers of new construction projects disturbing one acre of land or greater to apply for an individual permit for the discharge of stormwater associated with construction activity. The legal challenge to the general permit was resolved and MDE began accepting Notices of Intent to be covered by the new general permit (NOIs) effective July 13, 2009. A new NOI form is available on MDE's Website and must be completed in order to apply for coverage. Older versions of NOI forms will not be accepted. In order to ensure water quality standards are met, MDE requires individual discharge permits for all construction sites disturbing 150 acres or more that discharge stormwater to waters impaired by pollutants associated with construction activity. Individual permits are also required for construction sites disturbing between 30 and 150 acres that discharge to waters impaired by pollutants associated with construction activity if MDE receives a timely objection to the NOI that credibly supports the conclusion that, due to site-specific issues, applicable technical standards included under the general permit are not sufficient to ensure the protection of water quality standards.

The following are key changes to the general permit from the earlier version that expired on December 31, 2008:

- MDE requires applicants to submit a vicinity map, identify the waters receiving the stormwater discharge and state whether the receiving waters are listed on the 303(d) list as impaired for sediment as part of the NOI.
- In order to better accommodate public participation in the process to obtain general permit coverage, MDE scans NOI forms and enter the scan and related data into a database that is

available on MDE's website. The posting of the project in the database starts a minimum 45-day public participation period for sites with 3 acres or more of disturbed area or a 30-day period for sites with 1 to less than 3 acres of disturbed area. During this time, citizens may ask to review the available erosion and sediment control and stormwater management plans at the location designated by the approval authorities for those plans. Approval authority contact information is included on the NOI, but citizens who have difficulty obtaining access to plans may also contact the Water Management Administration (WMA), Compliance Program for assistance by calling 410-537-3510.

- MDE will not approve coverage under the general permit until the public participation period ends and the applicant provides notification that the erosion and sediment control plan for the site has been approved by the appropriate authority. Earth disturbance on the site cannot begin until after coverage is issued and the site has an approved stormwater management plan.
- Citizens may object to an NOI and request that MDE require an individual permit for a specific site. The Director of WMA will decide if an individual permit will be required based on an evaluation of all comments received.
- There is a new requirement under the general permit that erosion and sediment control plans and stormwater management plans (with the exception of those plans for sites previously covered under an earlier version of the general permit) include a written explanation that the plan addresses eight points: utilization of environmental site design, maintenance of limits of disturbance to protect natural areas, control of construction equipment and vehicles, evaluation and appropriate limitation of site clearing, evaluation and designation of site area for phasing or sequencing, identification of soils at high risk for erosion and advanced stabilization techniques to be used, identification of steep slopes and designation of limitations on clearing them, evaluation and designation of stabilization requirements and time limits and protection measures for discharges to the Chesapeake Bay, impaired waters or waters with an established Total Maximum Daily Load (TMDL).
- A new section includes requirements related to the prevention of the discharge of significant amounts of sediment that lists reasonable measures that all sites are required to take. If a significant sediment discharge occurs the permittee will be required to inspect, evaluate and, if needed, repair or install all site controls included in the approved erosion and sediment control plan. The permittee also needs to notify MDE and the plan approval authority about the event. If a second event occurs the permittee is required to have an engineer evaluate if the erosion and sediment control plan is adequate or whether additional on-site practices or plan modifications are needed and to advise MDE and the approval authority.
- The general permit states that coverage under this general permit will expire when the General Permit is reissued or expires, or when a Notice of Termination form has been completed by the permittee and received by MDE, whichever occurs first.
- The permit states that all plans for construction activity and any reports prepared pursuant to this permit, including self-inspection information, shall be available to the public. Upon request by the public, the permittee covered by this general permit shall make such documents available, with the exception of applicable portions of documents claimed as confidential in accordance with 40 Code of Federal Regulations (CFR) Part 2.
- The permittee must select, install, implement and maintain control measures (i.e., BMPs, controls, practices, etc.) at the construction site that minimize pollutants in the discharge as necessary to meet applicable water quality standards. The permittee must implement the control measures from commencement of construction activity until permanent stabilization is complete. In general, the stormwater controls developed, implemented, and updated consistent with the laws and regulations cited in Part II.A. of this general permit are considered as stringent as necessary to ensure that discharges covered by this permit do not cause or contribute to an excursion above any applicable water quality standard.

- At any time during the construction and stabilization phases until permit coverage is terminated, MDE may determine that the permittee's stormwater discharges may cause, have reasonable potential to cause, or contribute to an excursion above any applicable water quality standard. If such a determination is made, MDE will require the permittee to modify the stormwater controls to adequately address, achieve and document the identified water quality concerns, submit valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is attaining water quality standards, and/or cease discharges of pollutants from construction activity and submit an individual permit application.
- The general permit requires permittees to maintain at the site written reports of all inspections conducted by the permittee and adds that the permittee shall use the standard written report form as provided by MDE. The permittee shall ensure that the report includes the date and time of the inspection, the name(s) of the individual(s) who performed the inspection, whether significant amounts of sediment were observed, an assessment of the condition of erosion and sediment controls and how any deficiencies were or are being addressed, a description and date of any erosion and sediment control implementation and maintenance performed, including identification of any controls that have not been installed as required and a description of the site's present phase of construction. Note that the permit also specifies that the permittee must conduct inspections weekly and the next day after a rainfall event resulting in runoff. Some earlier permits required inspection the next business day after a rainfall event resulting in runoff, but the new permit requires inspection the next day.
- The general permit requires that if the stormwater discharge from a site enters a water with an established or approved TMDL, the permittee must implement measures to ensure that the discharge of pollutants from the site is consistent with the assumptions and meets the requirements of the approved TMDL, including any specific wasteload allocation that has been established that would apply to the discharge.

Maryland's Erosion and Sediment Control Program History

Legislation established to protect Maryland waters from various pollutants has existed since the early 1930s. However, it wasn't until 1961 that Maryland's Attorney General determined sediment to be a pollutant. This determination was based upon an interpretation of a 1957 State statute and authorized sediment control regulations to be developed. A statewide sediment control program was mandated in 1970 when the General Assembly passed the Sediment Control Law. From an historical perspective, Maryland's incentive for having an erosion and sediment control program is the Chesapeake Bay. From a practical standpoint, federal involvement via the National Pollutant Discharge Elimination System (NPDES) provides an incentive for State and local program development. Having an existing program has made compliance with NPDES requirements easier. The Chesapeake Bay initiatives in 1983, the U.S. Environmental Protection Agency's (EPA) 319 Nonpoint Source Program, and the NPDES municipal stormwater program have stimulated additional emphasis.

The program developed in 1970 is essentially with an approved plan being required for any earth disturbance of 5,000 square feet or more and 100 cubic yards or more; plan approval exemptions for agricultural uses; plan review and approval by local Soil Conservation Districts (SCD); grading ordinance adoption and project inspection by local jurisdictions; utility construction inspection by the Washington Suburban Sanitary Commission (WSSC); and criminal penalties for sediment pollution. Various programmatic improvements have included requiring sediment control plan approval prior to issuing grading and building permits (1973); requiring training and certification of "responsible personnel" (1980); shifting enforcement authority from local to State control and establishing delegation criteria (1984); limiting the exemption for single-family residential construction on 2-acre lots (1988); requiring NPDES stormwater discharge permits for construction activity (1991); and subjecting agricultural land management practices to enforcement action for sediment pollution (1992).

Maryland's Erosion Control Law and regulations specify the general provisions for program implementation; provisions for delegation of enforcement authority; requirements for erosion and sediment control ordinances; exemptions from plan approval requirements; requirements for training and certification programs; criteria for plan submittal, review, and approval; procedures for inspection and enforcement; and applicant responsibilities. Clearly defining minimum standards is essential to make erosion and sediment control work. MDE has established minimum criteria for effective erosion and sediment control practices. The 1994 Standards and Specifications for Soil Erosion and Sediment Control are incorporated by reference into State regulations and serve as the official guide for erosion and sediment control principles, methods, and practices. MDE is in the process of updating the Standards and Specifications. Further information about the proposed updated Standards and Specifications is available on MDE's Website.

Contractors and other construction industry personnel knowledgeable about erosion and sediment control principles, implementation and maintenance techniques, and specifications associated with various best management practices are an essential component of Maryland's statewide sediment control program. Well-trained construction personnel help to ensure that quality implementation and maintenance occur. Since 1980, many construction industry personnel have attended the Maryland Department of the Environment's (MDE) "Responsible Personnel Training for Erosion and Sediment Control" program.

Maryland's Stormwater Management Program History

The Stormwater Management Act was passed by the Maryland General Assembly in 1982. The primary goal of the State and local programs established by the Act is to "maintain after development conditions, as nearly as possible, the predevelopment runoff characteristics." Regulations promulgated by the State in 1983 define this to mean, for quantity control, on-site control of the 2 and 10 year storm events. In addition, for quality control, the Administration had established a list of preferred management practices. Pursuant to the list, local officials responsible for plan review were required to investigate the feasibility of infiltration of the first half inch of runoff – the so-called first flush. If infiltration was not feasible, other practices could be used. These other practices, in order of preference, were vegetated swales, retention ponds, extended detention, and detention facilities. Infiltration was preferred because it offered the highest potential to reduce pollutants such as sediment and phosphorus, addressed groundwater recharge and maintained baseflow, and mitigated thermal impacts. All incorporated counties and municipalities in Maryland were required to adopt ordinances by 1984, that established these controls on every development that disturbed more than 5,000 square feet of land.

In 2000, Maryland's stormwater management approach for new development projects used a unified sizing criteria for stormwater best management practices (BMPs) to meet pollutant removal goals, maintain groundwater recharge, reduce channel erosion, prevent overbank flooding, and pass extreme floods. See the "2000 Maryland Stormwater Design Manual" (http://www.mde.state.md.us/Programs/WaterPrograms/SedimentandStormwater/stormwater_design/index.asp) Performance standards are established for the design criteria of five groups of structural and nonstructural BMPs. Innovative site planning is an integral part of this approach relying on nonstructural site design techniques (e.g., roof top disconnection, natural area conservation, impervious surface area reductions, etc.) that reduce the generation of stormwater runoff and the reliance on structural BMPs. Maryland encourages wise, environmentally sensitive (site) designs (ESD) that reduces the generation of runoff borne pollution and promotes infiltration using groundwater recharge criteria from Natural Resources Conservation Service (NRCS) soil type data. Maryland's approach also requires that appropriate volumes be controlled to protect stream stability (channel protection volume) and large rainfall events (overbank and extreme flood protection).This stormwater management approach provides flexibility to localities and developers/designers by ensuring that innovative site design techniques (e.g.,

nonstructural BMPs) blend into local grading, building, and development codes while mandating a specific performance standard (e.g., 80% removal of TSS and 40% removal of P).

On April 24, 2007, Governor Martin O'Malley signed the "Stormwater Management Act of 2007" (Act), which became effective on October 1, 2007. Prior to this Act, environmental site design (ESD) was encouraged through a series of credits found in Maryland's Stormwater Design Manual. The Act requires that ESD be implemented to the maximum extent practicable through the use of nonstructural best management practices and other better site design techniques. MDE has developed guidance including proposed changes to regulation and a supplement to the Maryland Stormwater Design Manual for ESD (http://www.mde.state.md.us/Programs/WaterPrograms/SedimentandStormwater/swm2007.asp).

Permit Requirements

The permit includes requirements from previous permits regarding self-inspection and record keeping. The permit increases the opportunity for public participation in the NOI approval process by providing a delay before approval of NOIs by MDE so that citizens can be advised via MDE's Website that the NOIs have been submitted and erosion and sediment control plans have also been submitted for review by the plan approval authority. The permit includes a new section that requires that construction sites be monitored for a number of significant sediment discharge problems that, if observed, trigger review of site conditions on a first occasion and then review of plans to see if additional controls are needed. The permit also lists several key points to enhance environmental protection that must be addressed by the applicant when they are developing plans required by the permit. The permit also incorporates a section from EPA's general permit language that states that a permittee must select, install, implement and maintain control measures at a construction site that minimize pollutants in the discharge as necessary to meet applicable water quality standards and that, in general, the stormwater controls developed, implemented, and updated consistent with the laws and regulations cited in the general permit are considered as stringent as necessary to ensure that discharges covered by this permit do not cause or contribute to an excursion above any applicable water quality standard. The permit also includes a section that states that if the discharge covered by this permit enters a water with an established or approved Total Maximum Daily Load (TMDL), the permittee must implement measures to ensure that the discharge of pollutants from the site is consistent with the assumptions and meets the requirements of the approved TMDL, including any specific wasteload allocation that has been established that would apply to the discharge. Permittees currently holding any previous version of the general permit will be covered by the new general permit when it is issued.

Term of Permit

The permit is effective on January 1, 2009, and expires on December 31, 2013. Coverage under the general permit will expire when the general permit is reissued or expires, or when a Notice of Termination form has been completed and received by MDE, whichever occurs first.

Fee

The permit fee is as set in COMAR 26.08.04.09-1.

Availability of General Permit

Any person who wishes to review the tentative general permit that includes the proposed modifications may do so by visiting MDE's website at http://www.mde.state.md.us/Permits/WaterManagementPermits/water_applications/gp_construction.asp. In addition, a person may review the tentative general permit with proposed modifications by contacting Ms. Karen Kotofski-Smith at (410) 537-3510 to make an appointment. The information is available for

review during MDE's normal working hours, 8:00 a.m. to 5:00 p.m. Monday through Friday. Copies of the document may be procured at a cost of $0.36 per page.